

Alfa Tech Singapore

Company: Alfa Tech Singapore / Agritech
 Centre of National University of Singapore (NUS)
Location: Singapore
Installation date: 2021
Industry: Plant Research
Crop: Research centre (NUS)
Website: atce.com.sg



> PROJECT REQUIREMENTS

- > Alfa Tech, in collaboration with the Agritech Research Centre at the National University of Singapore (NUS) are undergoing the process of analyzing and researching innovation in the agriculture industry
- > With specific focus on agricultural machinery that can improve the efficiency and effectiveness of a diversified crop feeding process

> SOLUTION



SYSTEM PROFILE
CCS Fertigation Manager™

- 5 Systems, each featuring:**
- 6 EMEC Injectors
 - 12 Irrigation Circuits
 - Custom Programming

WHY ALFA TECH CHOSE CCS

Maximize control of the feed formulas for the growers at NUS as they experiment with different recipes, crops, fertilizers and growing methods. Automatically recording all parameters from the amount of each raw fertilizer used, EC and PH created with each recipe, time delivered and return EC values coming back from grow beds. The ability of the grower to log in remotely and check on their formulas with the added benefit of the staff at NUS being able to oversee all 5 machines and grow rooms remotely.

The Fertigation System is a precise fertilizer blending and delivery system that allows the grower to create various fertilizer feeding formulas for all types of crops including hydroponics, aeroponics, and traditional growing methods. The system is fully integrated to the internet allowing for remote control and monitoring

Shamaine C., Marketing & Business Development Manager - Alfa Tech Singapore

The Fertigation Manager™ is an industry leading technology that was created in partnership with the Harrow Research and Development Centre which is the largest greenhouse research complex facility in North America and part of the Agriculture and Agri-Food Canada.

Alfa Tech Singapore

Alfa Tech is a mechanical and electrical company that was established in the tech corridor of Silicon Valley back in 1987, and has been Singapore-based since 2007, "provides all across Asia an end-to-end design, advisory and at risk turnkey project delivery services. We de-risk clients' capital expansion experience and provide solutions customized to their needs."

Operating as the headquarters of their Asia based operations, one of Alfa Tech Singapore's most notable projects to date has been a well-documented joint effort with the National University of Singapore's (NUS) Agritech Research Centre and Climate Control Systems™. This project draws much needed attention to technological innovations in the agricultural industry that can aid in creating more effective and efficient mechanisms/processes of feeding crop. Additionally, this project by NUS's Agritech

Research Centre, focuses on bacterial/pathogen, allergen and pest control, or, more generically, plant health across the various lifespan stages. Fortunately, Climate Control System's revolutionary Fertigation Manager™, an innovative package

of hardware and software machinery tailor made to fit a farmer's needs, has been able to successfully achieve this feat for Alfa Tech Singapore and NUS's Agritech Research Centre. This notion is well-reinforced by Alfa Tech's Director of Design, Martin Nolasco, who states "the CCS Fertigation Manager™ is an excellent machine. We installed

As we are nearing an end to one of our Agri Tech projects, you can start seeing the greens that are produced using the fertigation system. The fertigation system blends and delivers various fertilizer formulas needed to allow the crops to grow.

Alfa Tech VestAsia Pte Ltd

5 CCS Fertigation Manager™ systems

at the new Agritech Centre of the National University of Singapore. Many people were quite surprised and impressed about the accuracy of the EC and PH level. The CCS programming team, most notably Andre Bilek (Sr. Controls/Software Developer), were key to achieve this state."

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Martin Nolasco, Director of Design - Alfa Tech Singapore

Alfa Tech is just beginning to scratch the surface of the capabilities of the CCS™ Fertigation Manager, and are excited to continue to discover more of its features that can aid in crop feeding, crop production, and crop health. Evidently, the team at Climate Controls is glad to receive feedback that Alfa Tech Singapore's, "researchers are

very interested that CCS's Fertigation Manager™ provides access to data for their studies" and additionally have confirmed that they, "have seen vegetables growing extremely healthy," thanks due in part to Climate Control Systems ground-breaking Fertigation Manager.

For more information on the systems described here, or to learn how Climate Control Systems can help automate your growing operation, contact us at sales@climatecontrol.com



ABOUT CLIMATE CONTROL SYSTEMS

CCS is an industry leader that has been at the forefront of the greenhouse automation industry since 1985. The highly capable team of engineers based out of Leamington, Ontario, one of Canada's fastest growing greenhouse farming communities, are consistently able to research and develop the most innovative and top tier hardware and software features that allow our customers to stay ahead of the competition by maximizing output and yield in addition to minimizing costs and wastage.